CLIPPEDIMAGE= JP404083405A

PAT-NO: JP404083405A

DOCUMENT-IDENTIFIER: JP 04083405 A

TITLE: SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE

PUBN-DATE: March 17, 1992

INVENTOR-INFORMATION:

YASUE, TADASHI

.....

ASSIGNEE-INFORMATION: NAME

SEIKO EPSON CORP

COUNTRY N/A

APPL-NO: JP02198824

APPL-DATE: July 26, 1990

INT-CL (IPC): H03F001/30; H03F003/45

differential amplifier circuit.

US-CL-CURRENT: 330/252

ABSTRACT:

PURPOSE: To improve the power supply noise removing ratio(PSRR) of an operational amplifier by providing this semiconductor integrated circuit device with a voltage amplifier circuit selected by the other ends of the 3rd

power supply line and the 2nd constant current source and inputting the output of a

CONSTITUTION: A differential amplifier stage constituted of a differential

amplifier circuit 1 and a constant current source transistor(TR) 7 amplifies a

differential voltage between input signals applied to an inverted input terminal 11 and a non-inverted input terminal 12 and outputs the amplified

voltage from a differential amplifier stage output terminal 13. An output

stage constituted of an active load TR 4 and a constant current source TR 8 $\,$

amplifies the output of the differential amplifier stage and drives an output load. Since a current change due to the output load driving of the

output
stage of the operational amplifier is mainly absorbed by the 3rd power
supply

line for supplying high potential to the output stage, an equivalent